

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1-96. (Canceled).

97. (Currently amended) A computer-implemented method for automatically extracting and displaying information about a product from a plurality of articles, the method comprising:

in response to receiving a search query for a product, searching an index of articles that describe products for sale;

identifying, based on the index searching, a plurality of articles from the index of articles that are responsive to the search query;

obtaining, based on the search query, at least one price for the product and at least one image of the product from each of the identified articles by:

automatically selecting and extracting a price for the product from a first article of the identified articles;

automatically selecting and extracting an image for the product from the first article based on the price;

repeating the selection and the extraction of prices and images for each of the identified articles; and

displaying, as a combined search result set, each of the prices extracted and the images extracted for the product from the identified articles.

~~determining, based on the index searching, that a first article is responsive to the search query, the first article including price information for the product and one or more images of the product;~~

~~selecting a price for the product from the first article;~~

~~selecting an image for the product from the first article based on the price; and
displaying the price and the image for the product.~~

98. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the image for the product based on the price comprises determining a distance between a location of the price for the product and a location of the image for the product within the first article.

99. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the image for the product comprises;

determining a distance within the first article between a location of the price for the product and a location of a term of the search query within the first article; and
determining a distance within the first article between a location of the image for the product and a location of the term of the search query within the first article.

100.-102. (Canceled).

103. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the image price for the product comprises determining a price representation score;
identifying a potential price in the first article;
identifying a price signal associated with the identified potential price in the first article;
determining whether the price signal indicates that the identified potential price is an actual price for the product; and
responsive to a positive determination, automatically extracting the actual price from the first article.

104. (Currently amended) The method of claim ~~97~~ 103, wherein ~~selecting the price for the product~~ the price signal comprises ~~determining~~ a font size of the identified potential price.

105. (Currently amended) The method of claim 97 103, wherein ~~selecting the price for the product~~ the price signal comprises ~~determining~~ a font face of the identified potential price.

106. (Currently amended) The method of claim 97 103, wherein ~~selecting the price for the product~~ the price signal comprises ~~determining~~ a word immediately preceding the identified potential price.

107. (Currently amended) The method of claim 97 103, wherein ~~selecting the price for the product~~ the price signal comprises ~~determining~~ a word immediately following the identified potential price.

108. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the image for the product based on the price comprises determining global information associated with the product

109. (Previously Presented) The method of claim 108, wherein determining global information associated with the product comprises one selected from the group consisting of: determining a number of documents from a source associated with the first article, determining a frequency of occurrence of the image for the product on a network, and determining a size of the image.

110. (Canceled).

111. (Canceled).

112. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the image for the product comprises ~~determining an aspect ratio associated with the image;~~

identifying a potential image in the first article based on the price;

identifying an image signal associated with the identified potential image in the first article;

determining whether the image signal indicates that the identified potential image is an actual image for the product; and

responsive to a positive determination, automatically extracting the actual image from the first article.

113. (Currently amended) The method of claim 97 ~~112~~, wherein ~~selecting the image for the product based on the price further~~ the image signal comprises ~~determining~~ a number of occurrence value associated with the identified potential image for the product.

114. (Canceled).

115. (Currently amended) The method of claim 97 ~~112~~, wherein ~~selecting the image for the product based on the price further~~ the image signal comprises ~~determining~~ a number of words within the first article between a location of the price for the product, a location of the identified potential image for the product, and a location of a term of the search query.

116. (Previously Presented) The method of claim 97, wherein the first article has a tree structure.

117. (Currently amended) The method of claim 116, wherein ~~selecting the image for the product based on the price further~~ identifying the image signal further comprises:

identifying ~~determining~~ a closest common ancestor to the price for the product and a term of the search query;

determining the distance from the closest common ancestor to the identified potential image; and

determining the distance from the closest common ancestor to the term of the search query.

118. (Currently amended) The method of claim 116, wherein ~~selecting the image for the product based on the price further~~ the image signal comprises ~~determining~~ a number of nodes in a smallest tree that contains a price for the product, an image for the product, and a term of the search query.

119. (Currently amended) The method of claim 116, wherein ~~selecting the image for the product based on the price further~~ the image signal comprises ~~determining~~ a depth of a smallest tree in the tree structure containing the price, the identified potential image for the product and a term of the search query.

120. (Currently amended) A computer program product for automatically extracting and displaying information about a product from a plurality of articles ~~an article~~, the ~~method~~ computer program product comprising:

a computer-readable medium; and

computer program code, encoded on the medium, for:

in response to receiving a search query for a product, searching an index of articles that describe products for sale;

identifying, based on the index searching, a plurality of articles from the index of articles that are responsive to the search query;

obtaining, based on the search query, at least one price for the product and at least one image of the product from each of the identified articles by:

automatically selecting and extracting a price for the product from a first article of the identified articles;

automatically selecting and extracting an image for the product from the first article based on the price;
repeating the selection and the extraction of prices and images for each of the identified articles; and
displaying, as a combined search result set, each of the prices extracted and the images extracted for the product from the identified articles.
~~determining, based on the index searching, that a first article is responsive to the search query, the first article including price information for the product and one or more images of the product;~~
~~selecting a price for the product from the first article;~~
~~selecting an image for the product from the first article based on the price; and~~
~~displaying the price and the image for the product.~~

121. (Currently amended) A computer-implemented system for automatically extracting and displaying information about a product from a plurality of articles ~~an article~~, the ~~method~~ system comprising:

means for searching an index of articles that describe products for sale in response to receiving a search query for a product;

means for identifying, based on the index searching, a plurality of articles from the index of articles that are responsive to the search query;

means for obtaining, based on the search query, at least one price for the product and at least one image of the product from each of the identified articles by:

automatically selecting and extracting a price for the product from a first article of the identified articles;

automatically selecting and extracting an image for the product from the first article based on the price;
repeating the selection and the extraction of prices and images for each of the identified articles; and
means for displaying, as a combined search result set, each of the prices extracted and the images extracted for the product from the identified articles.
~~means for determining, based on the index searching, that a first article is responsive to the search query, the first article including price information for the product and one or more images of the product;~~
~~means for selecting a price for the product from the first article;~~
~~means for selecting an image for the product from the first article based on the price; and~~
~~means for displaying the price and the image for the product.~~

122. (Currently amended) The method of claim 97, wherein automatically selecting and extracting the price for the product from the first article comprises determining a best price from among ~~the~~ a plurality of prices selected from the first article, and wherein automatically selecting and extracting an image for the product from the first article based on the price comprises determining a best image from among ~~the~~ a plurality of images selected from the first article.

123. (Previously Presented) The method of claim 122, wherein determining the best price and the best image for the product comprises:

ranking the prices and the images selected from the first article;
selecting a highest ranked price for the product as the best price; and
selecting a highest ranked image for the product as the best image.

124. (Previously Presented) The method of claim 123, wherein the ranking ranks based on the distance between each image and each price selected for the product.

125. (Previously Presented) The method of claim 123, wherein ranking ranks the price based on a price representation score of each price selected for the product.

126. (Previously Presented) The method of claim 123, wherein the best price is a price most likely to be correctly associated with the product.

127. (Previously Presented) The method of claim 123, wherein the best image is an image most likely to be correctly associated with the product.

128. (Currently amended) The method of claim 97, further comprising:

~~determining, based on the index searching, that a second article is responsive to the~~

~~search query, the second article including price information for the product and one or more images of the product;~~

automatically selecting and extracting a second price for the product from ~~the~~ a second article of the identified articles;

automatically selecting and extracting a second image for the product from the second article based on the second price; and

displaying in the combined search result set the ~~best~~ second price and the ~~best~~ second image for the product extracted from the second article ~~document~~.

129. (New) The method of claim 103, wherein the price signal comprises a price representation score for the identified potential price that scores the degree to which the identified potential price appears to be an actual price.

130. (New) The method of claim 112, wherein the image signal comprises an aspect ratio associated with the identified potential image.

131. (New) The method of claim 97, wherein obtaining, based on the search query, at least one price for the product and at least one image of the product from each of the identified articles further comprises:

selecting a plurality of potential prices and a plurality of potential images for the product from the first article, the prices selected based on terms of the search query, the images selected based on the terms of the search query and based on the prices selected, wherein the selection includes a distance between a location of each of the prices within the first article and a location of each of the images within the first article; and

making a ranked list of the potential prices and of the potential images selected for the product from the first article, wherein prices and images that are located nearer to each other within the first article are ranked higher than prices and images that are farther apart from each other.

132. (New) The method of claim 131, wherein automatically selecting and extracting a price for the product from the first article further comprises:

identifying a highest ranked price from the potential prices on the ranked list for the first article; and

automatically selecting and extracting the highest ranked price from the first article.

133. (New) The method of claim 131, wherein automatically selecting and extracting an image for the product from the first article further comprises:

identifying a highest ranked image from the potential images on the ranked list for the first article; and
automatically selecting and extracting the highest ranked image from the first article.